

This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

1.-25. (Canceled).

26. (Currently Amended) A method for a user interface to accept laboratory experiment information for control of a laboratory experiment, the method using a computer system, the computer system including a processing system coupled to a network, wherein a user input device, display device and processor are coupled to the processing system, the method comprising

accepting signals from the user input device to define a parameter of [[an]] a probe array experiment;

transferring the parameter to the network;

receiving experiment results from the network, wherein the experiment results include results from [[an]] the probe array experiment using the parameter; and

displaying the experiment results on the display device.

27. (Previously Presented) The method of claim 26, further comprising using the processor to display information sections including one or more of the following: sample, experiment, probe array.

28. (Previously Presented) The method of claim 26, wherein the step of accepting signals includes a substep of:

accepting signals to define a probe array image identifier.

29. (Previously Presented) The method of claim 26, wherein the step of accepting signals includes a substep of:

accepting signals to define a probe array type.

30. (Previously Presented) The method of claim 26, wherein the step of accepting signals includes a substep of:

accepting signals to indicate a probe array analysis set.

31. (Previously Presented) The method of claim 26, wherein the step of accepting signals includes a substep of:

accepting signals to indicate a target database for publishing experiment results.

32. (Currently Amended) A method for displaying laboratory experiment information, the method using a computer system, the computer system including a processing system coupled to a network, wherein a display device and processor are coupled to the processing system, the method comprising

using the processor to display steps of setup and execution of [[an]] a probe array experiment over the network; and

using the processor to display a result for a sample for one or more of the displayed steps.

33. (Canceled)

34. (Currently Amended) A computer program embodied on a computer-readable medium for a method to accept laboratory experiment information, the method using a computer system, the computer system including a processing system coupled to a network, wherein a user input device, display device and processor are coupled to the processing system, the computer program including

one or more instructions for accepting signals from the user input device to define a parameter of [[an]] a probe array experiment;

one or more instructions for transferring the parameter to the network;

one or more instructions for receiving experiment results from the network,  
wherein the experiment results include results from [[an]] the probe array experiment using the  
parameter; and

displaying the experiment results on the display device.

35. (New) The method of claim 26 wherein accepting signals to define the  
probe array experiment parameter comprises accepting signals to control scanning.

36. (New) The method of claim 35 wherein the probe array experiment  
parameter comprises at least one of a probe array image identifier, an experiment name, a probe  
array type, a number of scans to be performed, an assay type, a sample project, an experiment,  
and a display of a scanned experiment.

37. (New) The method of claim 26 wherein accepting signals to define the  
probe array experiment parameter comprises accepting signals to control grid alignment.

38. (New) The method of claim 37 wherein the probe array experiment  
parameter comprises at least one of experiment information, file type, probe array information,  
sample information, probe array type, sample type, sample project, and manual/automatic grid  
alignment.

39. (New) The method of claim 26 wherein accepting signals to define the  
probe array experiment parameter comprises accepting signals to control cell average analysis.

40. (New) The method of claim 39 wherein the probe array experiment  
parameter comprises at least one of a sample project, an experiment name, a sample type, a  
probe array type, a user name, an image data/ probe array type, a cell average name, image data,  
cell data, and an algorithm.

41. (New) The method of claim 26 wherein accepting signals to define the probe array experiment parameter comprises accepting signals to control hybridization.
42. (New) The method of claim 41 wherein the probe array experiment parameter comprises at least one of a hybridization fragmented expression vessel identifier, a probe array image identifier, sample information, and experiment information.
43. (New) The method of claim 32 wherein the processor is used to display setup and execution of scanning in the probe array experiment.
44. (New) The method of claim 43 wherein a displayed parameter of the probe array experiment comprises at least one of a probe array image identifier, an experiment name, a probe array type, a number of scans to be performed, an assay type, a sample project, an experiment, and a display of a scanned experiment.
45. (New) The method of claim 32 wherein the processor is used to display setup and execution of grid alignment in the probe array experiment.
46. (New) The method of claim 45 wherein a displayed parameter of the probe array experiment comprises at least one of experiment information, file type, probe array information, sample information, probe array type, sample type, sample project, and a manual/automatic grid alignment.
47. (New) The method of claim 32 wherein the processor is used to display setup and execution of cell average analysis in the probe array experiment.
48. (New) The method of claim 47 wherein a displayed parameter of the probe array experiment comprises at least one of a sample project, an experiment name, a sample

type, a probe array type, a user name, an image data/ probe array type, a cell average name, image data, cell data, and an algorithm.

49. (New) The method of claim 32 wherein the processor is used to display setup and execution of hybridization in the probe array experiment.

50. (New) The method of claim 49 wherein a displayed parameter of the probe array experiment comprises at least one of a hybridization fragmented expression vessel identifier, a probe array image identifier, sample information, and experiment information.

51. (New) The computer program of claim 34 further comprising instructions for accepting signals to define a scanning parameter in the probe array experiment.

52. (New) The computer program of claim 51 wherein the scanning parameter comprises at least one of a probe array image identifier, an experiment name, a probe array type, a number of scans to be performed, an assay type, a sample project, an experiment, and a display of a scanned experiment.

53. (New) The computer program of claim 34 further comprising instructions for accepting signals to define a grid alignment parameter in the probe array experiment.

54. (New) The computer program of claim 53 wherein the grid alignment parameter comprises at least one of experiment information, file type, probe array information, sample information, probe array type, sample type, sample project, and a manual/automatic grid alignment.

55. (New) The computer program of claim 34 further comprising instructions for accepting signals to define a cell average analysis parameter in the probe array experiment.

56. (New) The computer program of claim 55 wherein the cell average analysis parameter comprises at least one of a sample project, an experiment name, a sample type, a probe array type, a user name, an image data/ probe array type, a cell average name, image data, cell data, and an algorithm.

57. (New) The computer program of claim 34 further comprising instructions for accepting signals to define a hybridization processes parameter in the probe array experiment.

58. (New) The computer program of claim 57 wherein the hybridization process parameter comprises at least one of a hybridization fragmented expression vessel identifier, a probe array image identifier, sample information, and experiment information.